In the Claims:

Please amend the claims as follows:

1 (currently amended) A device to convert energy comprising:

a first rotor having an axis of rotation and the first rotor is adapted to rotate about said axis of rotation and having a longitudinal forward location and longitudinal rearward location, a first set of vanes having engagement surfaces located in the longitudinal forward region, a second set of vanes having engagement surfaces that are located in a longitudinally rearward location, an outer surface that partially forms a sphere;

a second rotor having an axis of rotation and adapted to rotate about said axis of rotation and having a longitudinal forward location and longitudinal rearward location, a first set of vanes having engagement surfaces located in the longitudinal forward region, a second set of vanes having engagement surfaces that are located in a longitudinally rearward location, an outer surface that partially forms a sphere;

a casing that is adapted to house the said first rotor and the second rotor and having a top dead center location and a bottom dead center location, the casing comprising a first lateral region and a second lateral region where an inlet port is provided in the said first lateral region that provides communication to the said first and second rotor and an outlet port in the

second lateral region that is in communication to the first and second rotors;

whereas the first and second rotors are offset from being collinear by an angle alpha where ~~the and~~ the engagement surfaces of the first set of vanes of the first rotor are adapted to engage the engagement surfaces of the first set of vanes of the second rotor at the said top dead center location and the engagement surfaces of the second set of vanes of the first rotor are adapted to engage the engagement surfaces of the second set of vanes of the second rotor at the bottom dead center location the engagement surfaces of the first and second set of vanes of the first and second rotors are not in engagement when located in the first and second lateral regions.

2 (original) The device as recited in claim 1 where the first and second set of vanes of the first and second rotors collectively define chambers.

3 (original) The device as recited in claim 2 where the said chambers are sealed at the top dead center and bottom dead center locations where the casing engages an outer surface of the first and second rotors to created a top dead center sealed chamber and a bottom dead center sealed chamber.

4 (original) The device as recited in claim 1 where a center sphere is positioned interposed between the first and second rotors.

5 (original) The device as recited in claim 1 whereby each engagement surface of the first set of vanes for the first rotor has a corresponding engagement surface for the first set of vanes for the second rotor.

6 (original) The device as recited in claim 1 where the vanes of the first set of vanes are rotationally interposed between the vanes of the second set of vanes for the first rotor.

7 (original) The device as recited in claim 1 where the device is adapted to receive incompressible fluid from the inlet port and is further adapted to discharge the incompressible fluid at the discharge port.

8 (original) The device as recited in claim 5 where corresponding engagement surfaces fo the first and second rotors of the first set of vanes only engage at the top dead center region.

9 (currently amended) The device as recited in claim 5 where the inlet port is defined a low pressure region ~~nad the~~ and the outlet port is a high pressure region.

10 (original) The device as recited in claim 9 where the corresponding engagement surfaces of the first set of vanes of the first and second rotors provides a seal between the high and low pressure regions.

11 (original) The device as recited in claim 1 where the first rotor is driven and the second rotor is a slave rotor.

12 (original) The device as recited in claim 11 where the engagement surface of the first set of vanes for the first and second rotors has a mean location that is longitudinally forward with respects to the mean location of the engagement surfaces of the second set of vanes of the first and second rotors.

13 (original) The device as recited in claim 12 where the slave rotor has an opposing counter torque to the power rotor that is a function of the diference of the mean location of the enagement surfaces of the first and second set of vanes of the first and second rotors.

14 (currently amended) The device as recited in claim 1 where the first rotor is substantially ~~identicle~~ identical to the second rotor.

15 (original) The device as recited in claim 1 where a rotational counter is attached to the first rotor.

16 (original) The device as recited in claim 15 where the volumetric throughput of the rotors from the inlet port to the outlet port is a first known value per unit of rotation of the first and second rotors and the volumetric throughput of the device is a determined from the counter and the first known value.

17 (original) The device as recited in claim 5 whereby each corresponding surface of the first set of vanes is in face to face engagement.

18 (original) The device as recited in claim 12 where the net force of fluid imposed upon the slave rotor creates a counter torque opposing the rotational torque on the power rotor to create seal at the engagement surfaces that are engaged with one another at the top dead center location.

19 (currently amended) A pump that is adapted to increase the pressure of an operating fluid, pump comprising:

a first rotor having an axis of rotation and the first rotor is adapted to rotate about said axis of rotation and having a longitudinal forward location and longitudinal rearward location, a first set of vanes having engagement surfaces located in the longitudinal forward region, a second set of vanes having engagement surfaces that are located in a longitudinally rearward location, an outer surface that partially forms a sphere;

a second rotor having an axis of rotation and adapted to rotate about said axis of rotation and having a longitudinal forward location and longitudinal rearward location, a first set of vanes having engagement surfaces

located in the longitudinal forward region, a second set of vanes having engagement surfaces that are located in a longitudinally rearward location, an outer surface that partially forms a sphere;

a casing that is adapted to house the said first rotor and the second rotor and having a top dead center location and a bottom dead center location, the casing comprising a first lateral region and a second lateral region where an inlet port is provided in the said first lateral region that provides communication to the said first and second rotor and an outlet port in the second lateral region that is in communication to the first and second rotors and the casing at the top dead center and bottom dead center location engages the outer surfaces of the first and second rotor to provide a seal from the inlet port to the outlet port;

whereas the first and second rotors are offset from being collinear by an angle alpha where ~~the and~~ the engagement surfaces of the first set of vanes of the first rotor are adapted to engage the engagement surfaces of the first set of vanes of the second rotor at the said top dead center location and the engagement surfaces of the second set of vanes of the first rotor are adapted to engage the engagement surfaces of the second set of vanes of the second rotor at the bottom dead center location the engagement surfaces of the first and second set of vanes of the first and

second rotors are not in engagement when located in the first and second lateral regions.

20 (original) The pump as recited in claim 19 where the first and second set of vanes of the first and second rotors collectively define chambers.

21 (original) The pump as recited in claim 20 where the chambers change in volume in the first and second lateral regions.

22 (currently amended) The device as recited in ~~claim 18~~ claim 19 where a center sphere is positioned interposed between the first and second rotors.

23 (currently amended) The device as recited in ~~claim 18~~ claim 19 whereby each engagement surface of the first set of vanes for the first rotor has a corresponding engagement surface for the first set of vanes for the second rotor.

24 (currently amended) The device as recited in ~~claim 18~~ claim 19 where the vanes of the first set of vanes are rotationally interposed between the vanes of the second set of vanes for the first rotor.

25 (currently amended) The device as recited in ~~claim 18~~ claim 19 where the device is adapted to receive incompressible fluid from the inlet port and is further adapted to discharge the incompressible fluid at the discharge port.

26 (original) The device as recited in claim 23 where corresponding engagement surfaces fo the first and second rotors of the first set of vanes only engage at the top dead center region.

27 (original) The device as recited in claim 23 where the inlet port is defined a low pressure region ~~nad the~~ and the outlet port is a high pressure region.

28 (original) The device as recited in claim 27 where the corresponding engagement surfaces of the first set of vanes of the first and second rotors provides a seal between the high and low pressure regions.

29 (currently amended) A method of increasing the pressure of a fluid comprising the steps of:

~~retreiving~~ retrieving a rotor set comprising a first and second rotor that are mounted about an axis of rotation that is offset from being colinear and the rotors having a top dead center location and a bottom dead center location where the each rotor has a first set of vanes and a second set of vanes where the first set of vanes have engagement surfaces that are located in the longitudinally forward location of each rotor and the engagement surfaces of the vanes of the opposing first and second rotors are adapted to engage one another only at the top dead center location, the rotors each further comprising a second set of vanes where each vane has an engagement surface where opposing vane of the second set of vanes on the first and second rotor is only in engagement at the bottom dead center location, the volume between the first and second rotors defines chamber regions,

positioning the rotors in a casing where the casing has an inner surface that engages an outer surface of the rotors at the bottom dead center and top dead center locations where a first lateral surface of the casing defines an inlet port and a second lateral surface defines an outlet port,

providing communication from the inlet port to the fluid and rotating the rotors so the chamber regions in communication with the inlet port are expanding, passing the fluid past the top dead center location where two

adjacent engaged enagement surfaces of opposing vanes of the first set of vanes for the first and second rotors and the inner wall of the casing creates a seal from the outlet port and the inlet port and discharging a portion of the fluid to the outlet port and two adjacent engaged enagement surfaces of opposing vanes of the second set of vanes for the first and second rotors and the inner surface of the casing at the bottom dead center location further provides a seal from the outlet port to the inlet port.

30 (original) The method as recited in claim 29 where a center sphere is positioned interposed between the first and second rotors.

31 (original) The method as recited in claim 29 whereby each engagement surface of the first set of vanes for the first rotor has a corresponding engagement surface for the first set of vanes for the second rotor.

32 (original) The method as recited in claim 29 where the vanes of the first set of vanes are rotationally interposed between the vanes of the second set of vanes for the first rotor.

33 (original) The method as recited in claim 29 where the device is adapted to receive incompressible fluid from the inlet port and is further adapted to discharge the incompressible fluid at the discharge port.

34 (original) The method as recited in claim 33 where corresponding engagement surfaces fo the first and second rotors of the first set of vanes only engage at the top dead center region.

35 (original) The method as recited in claim 29 where the first rotor is driven and the second rotor is a slave rotor.

36 (original) The method as recited in claim 35 where the engagement surface of the first set of vanes for the first and second rotors has a mean location that is longitudinally forward with respects to the mean location of the engagement surfaces of the second set of vanes of the first and second rotors.

37 (original) The method as recited in claim 36 where the slave rotor has an opposing counter torque to the power rotor that is a function of the diference of the mean location of the enagement surfaces of the first and second set of vanes of the first and second rotors.